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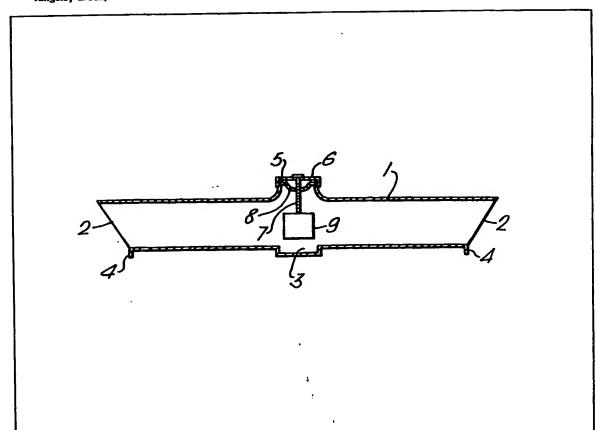
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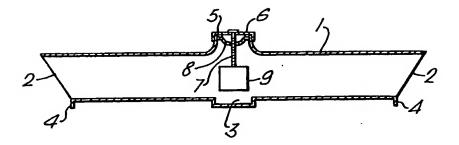
(54) Bait feeder

(57) A rodent bait feeder comprises a hollow body 1 having apertures 2, such that a rodent can pass through an aperture, along a path within the body, and out through another aperture, and also comprises an aperture, closed by a removable, lockable cap 6 which carries means 7 from which solid bait 9 can be suspended in the path.



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#### **SPECIFICATION**

#### **Bait feeder**

5 This invention relates to apparatus of the type in which bait for rodents may be held, and which allows the rodents to take the bait while preventing humans, particularly children, livestock, e.g. domestic animals, pets and poultry, and beneficial wildlife 10 larger than rodents, from taking the bait when it is being used to control rodents.

It is of course well known to place poison baits to kill rodent pests. The main problem associated with laying these rodenticides is to ensure that they are in a place where the rodents can take it but harmless species cannot. Therefore, rat poison often cannot be left in any exposed place without endangering animal life.

Various simple systems have been proposed for laying down rodent bait in order to ensure that it will not be taken by another species. On the basis that rodents will often prefer to travel along sheltered paths, it has been proposed to lay bait in, for example, broken pipes, used tyres or closed boxes whose sides have been opened to allow the rodents, but no substantially larger animal, to enter.

While the sytems described have the advantage of simplicity, they have the disadvantage of making it difficult to check when all the bait in, say, a pipe has been taken. It is characteristic of many rodenticides, and well known in the art, that bait should be made continually available to rodent populations for several days or weeks. In an open area, therefore, it may be necessary to check each day whether there is sufficient bait in place, a very tiresome procedure in adverse weather conditions.

A further disadvantage of conventional bait laying procedures is that rain may enter the, say, pipe and disperse, render unpalatable, or lead to deterioration of, the bait. Alternatively, a small pile of bait on the floor of such a pipe may quickly be dispersed by a large rodent population. Therefore, the effectiveness of the bait may be reduced and/or the bait may disperse towards the openings in the enclosure, thereby allowing harmless species to have access to the bait through the openings.

British Patent Specification No 1,567,803 discloses apparatus for laying poisoned bait, which comprises an elongate tubular container having open ends, and including a bait holder in the container, which can be charged through a closable opening in a side of the container. The closable opening may comprise one complete side of a container of substantially square cross-section. Alternatively, a bait silo may be protided, through which particulate bait is allowed to discharge into a trough on the floor of the container. The silo provided is fixed to the top of the container and is accessible via an aperture which can be closed with a screw cap.

60 In use of the apparatus disclosed in British Patent Specification No 1,567,803, all the disadvantages associated with the use of particulate bait may be observed. For example, bait particles may be dragged out of the container by the rodents, to a place 65 where harmless species can take the bait. Even

where the container is mounted against, say, a wall, elaborate precautions are necessary if children are to be prevented from tilting or removing the container and thus discharging bait into an open area. In ships where rodent control is a necessity, bad weather will cause bait to be dispersed out of such apparatus, even if it is fixed to a wall or deck.

A rodent bait feeder according to the present invention comprises a hollow body having apertures, such that a rodent can pass through an aperture, along a path within the body, and out through another aperture, and the bait feeder comprises a further aperture, closed by a removable, lockable cap which carries means from which solid bait can be suspended in the path. In use, solid bait is suspended from or otherwise attached to the carrying means.

Externally, a bait feeder of the invention of the invention may resemble a conventional pipe or box with apertures allowing the passage of rodents. However, in use, dispersal of the bait is prevented, and the closable aperture serves as an inspection and possibly charging aperture, so that the quantity and state of the bait can be checked easily and 90 replenished as necessary. Although a bait feeder of the invention may in itself be more expensive than a discarded drainpipe or box, it is believed that the easier application and checking of the bait, the greater control over the application of the bait, and the 95 improved safety, in particular that provided by internal attachment of the solid bait, provide economies which more than compensate for any increase in cost.

The hollow body of a bait feeder according to the invention may comprise, for example, a box or tube. It may be a right cylinder or a tube of square cross-section. The rodent apertures are suitably formed in the ends of the body which may thus, for example, take the form of an open-ended tube. Means may be provided for closing the ends, e.g. during a period when the rodents are inactive. Such means may be in the form of a hinged or independent cap; any independent cap may be independently mounted on the side of the body when the apertures are open.

The rodent apertures will have a size such that they allow rodents to pass therethrough but effectively prevent larger animals from taking the bait. The apertures and/or body of the bait feeder may have a minimum cross-section of, for example, 70 mm and a maximum cross-section of 300 or, more preferably, 200 mm. Such sizes are appropriate for rats but smaller measurements, e.g. a factor of 0.5 smaller, may be appropriate for mice. The rodent apertures may be cut away, e.g. at angle of 45°, to minimise the possibility of rain entering the body.

The length of the hollow body between the apertures is preferably at least 300 mm but will not usually be more than 2 m. Again, such dimensions are particularly suitable for rats and may be varied as appropriate for mice.

The inspection aperture is suitably positioned substantially equidistant from the rodent apertures. The inspection aperture is closed by a removable cap which can be locked in position by any suitable 130 means. For example, the cap may be provided with

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an internal catch mounted on a screw, the screw then being tightened when the catch is in mating engagement with a finage on the inspection aperture. The cap may or may not be attached permanently to the rest of the device.

The amount of bait in the apparatus, and the degrees to which it has been taken and to which it needs replenishing, can be readily checked by removing the cap. If desired, ease of inspection may 10 be facilitated by the provision of, say, a transparent section in the wall of the body.

A bait receptacle will usually be positioned beneath the bait-carrying means. The provision of such a receptacle prevents the ready dispersal of any 15 particles of bait which may be dislodged from the suspended solid mass, e.g. by rodents taking the bait. The receptacle may suitably be formed as a well in the floor of the body. Alternatively, it may be formed by providing ridges around an area in the 20 floor or by the provision of a cup-shaped member on the floor. The depth of the receptacle or, as the case may be, the height of the walls above its base, may be, for example, from 5 to 20 mm. The area of the receptacle may be, for example, from 500 to 10,000 25 mm<sup>2</sup>.

For use in farms or other locations where rodents are present in large numbers, it may be desirable to employ a number of bait feeders according to the invention. In such circumstances, it may be approp-30 riate to provide remote control of closure of the rodent apertures, e.g. during the day, and/or monitoring of the amount of balt in each feeder.

A bait feeder of the invention may be formed from any suitable rigid material. The material may be cho-35 sen with regard to its place and conditions of use, e.g. depending on the ambient climate and possibility of the device being subject to crushing forces, e.g. from machinery or livestock. Suitable materials include plastics and pressed steel which may subsequently be galvanised.

The bait feeder may be provided with means for attaching it to a wall or to the ground. This may be appropriate where there are known rodent tracks; such tracks are invariably encountered close to 45 buildings etc. or where otherwise human or animal disturbance may detrimentally move the bait feeder. It may also be provided with a handle to allow ready transportation.

The invention will now be described by way of 50 example with reference to the accompanying drawing which is a cross-sectional side view (not to scale) of a bait feeder according to the present invention. ready for use. The feeder comprises a hollow body 1 of substantially square cross-section with open cut-55 away ends 2. A well 3 is formed in the floor of the body and the feeder stands on this well and on feet 4. The feeder also includes an aperture, having a partial flange 5, closed with a cap 6 bearing a screw 7 on which is threaded a catch member 8 co-operating 60 with the flange 5. A piece of solid bait 9 is suspended from the screw 7. **CLAIMS** 

1. A rodent bait feeder which comprises a hollow body having apertures, such that a rodent can pass 65 through an aperture, along a path within the body,

and out through another aperture, an which comprises a further aperture, closed by a removable, lockable cap carrying means from which solid bait can be suspended in the path.

- 2. A rodent bait feeder according to claim 1, in which solid bait is suspended from the carrying means.
- 3. A rodent bait feeder according to claim 1 or claim 2, which includes a receptacle for bait, beneath 75 the carrying means.
  - 4. A rodent bait feeder substantially as herein described with reference to the accompanying draw-

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